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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/607,065 | 06/29/2000 | Jussi Ruutu | 975.306USW1 | 7291 |

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SQUIRE, SANDERS & DEMPSEY L.L.P.
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8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

NGUYEN, BRIAN D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2661

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/607,065

Applicant(s)

RUUTU ET AL.

Examiner

Brian D Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

1. Claims 1-2 and 4-7 are objected to because of the following informalities:

Claim 1, line 12, it is suggested to change "base station controller unit" to ---base station control unit---.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Lucent Technologies (EP 0 801 513).

Regarding claims 1, 2, and 4-6, Lucent discloses a broadband cellular network device comprising a base station control unit (28), an ATM controller (48, 51, 80, 72), and an ATM switch (50, 58, 70). The base control unit controls the distribution of ATM cells, the ATM controller controls connecting hardware of the ATM switch and converting commands of a first protocol issued by the base control unit into commands of a second protocol causing switching action (see 79 of figures 4 & 5); wherein the ATM controller comprises two functional layers, one for performing cellular network related functions and the other for switching related functions (see abstract; figures 3-6; and col. 7, line 14-col.13, line 39).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lucent Technologies (EP 0 801 513) in view of Korpela (5,946,634) or Takase et al (5,963,555).

Regarding claim 7, Lucent discloses all the claimed subject matter as described in previous paragraph except for adapting a General Switch Management Protocol (GSMP). However, using the GSMP is well known in the art. Korpela and Takase disclose the use of GSMP (see figure 6 and col. 5, lines 39-51 of Korpela and col. 2, lines 15-17 of Takase). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the GSMP as taught by Takase and Korpela in the system of Lucent with the motivation being to allow the system to communicate with GSM network.

Response to Arguments

6. Applicant's arguments filed 11/21/03 have been fully considered but they are not persuasive.

The applicant argued that *the Office appears to consider, in the rejection of claims 1, 2 and 4-6, the elements 28, 48 (see Fig. 3) of Lucent Technologies to be equivalent to a base station control unit, and further considers the ATM switching fabric control 51 of Lucent Technologies to be equivalent to an ATM controller (or protocol converter) as in the present*

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application. However, one of the important differences between Lucent Technologies and the present invention is that, as one can see, the ATM switching fabric control unit element 51 of Lucent Technologies is inside the switch 46 which is directly connected to the element 48 (see Fig. 3) and thus it is not making any protocol conversions. This argument is not persuasive because besides element 51, the ATM controller of Lucent also include elements 48, 80, and 72 for performing protocol conversion, ATM switch controlling, and ATM cell switching. The ATM fabric controllers 51 and 80 are for controlling the ATM fabric for ATM cell switching and the ATM switch controllers 48 and 72 are for performing the protocol conversion and controlling the ATM switch. Figure 3 is just one of the four embodiments in Lucent that all can apply to the claimed invention. In figure 3, the protocol conversion is performing by the ATM switch controller 48 and the ATM fabric controller 51 is for controlling the switching of ATM cells within the ATM switch 46. If the applicant prefer the claimed ATM controller as a device for performing protocol conversion and for controlling the ATM switch then element 48 of figure 3 is equivalent to the claimed ATM controller. In figures 4 and 5, element 48 of figure 3 is replaced by element 72 that include a protocol conversion 79. The ATM fabric controllers 51 and 80 are for controlling the ATM fabrics 50, 58 and 70. The applicant also argued that *in the present invention, the control of the switching fabric is inside the cellular switch and the ATM controller is arranged to function between the base station control unit and the ATM switching means and is arranged to provide an interface for converting commands . . . issued by the base station controller unit into commands of a second communication protocol.* As in figures 3-6, the controlling (51) of the switching fabric (50, 58) is inside the cellular switch (46). In figure 3, the ATM controller 48 is arranged to function between the base station control unit 28 and ATM

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switch 46. In figures 4-5, the ATM controller 72 is arranged to function between the base station control unit 28 and ATM switch 70 and 46. Both elements 48 and 72 are capable of converting commands . . . issued by the base station control unit 28 into commands of a second communication protocol. The applicant also argued that *element 28 directly controls the ATM switching fabric control 24 and there is no ATM control element which would make protocol conversion in between these two functionalities*. This argument is irrelevant because the fabric controller 24 is not an ATM fabric controller and switch 10 is not an ATM switch. Therefore, it does not apply to the claimed invention. The applicant also argued that *in Lucent Technologies, the control elements 28, 48 are used for call control, authentication, paging, billing and location management functions for the calls, and these elements are directly signaling with the switches 46 and 10. Thus, the present invention is not needed in the scheme used in the Lucent Technologies*. This argument is not persuasive because besides performing functions described by the applicant, element 48 also perform protocol conversion as claimed by the claimed invention. As mentioned above, switch 10 is not an ATM switch. With respect to the rejection of claim 7, the applicant argued that *even if the applicants accepted that Korpela and Takase teach what the Office has alleged, neither reference cures the deficiencies of Lucent*. The examiner disagrees because Lucent does disclose all the limitations as discussed above. Therefore; there is no deficiency to cure.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Brian Nguyen
12/30/03